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April 9, 1987

ADMIN RECORD

Dr. Thomas Vernon
Director
Colorado Dept. of Health
4210 E. 11th Ave
Denver, CO 80220

DOCUMENT CLASSIFICATION REVIEW WAIVER PER CLASSIFICATION OFFICE

Dear Dr. Vernon

You have been made aware of considerable emotional resistance to the issuance of a permit for a trial burn period of the Rocky Flats incinerator. This letter is submitted as evidence that there also exist many serious concerns felt by the community of scientists and engineers. The attached statements represent the views of a biologist, a meteorologist, a chemist, a process engineer and a geological engineer. Each is accompanied by a brief summary.

We find abundant reasons to urge that you deny the application for a trial burn. It is our belief that the equipment, the plan, the monitoring, and the documentation are so flawed and deficient, so threatening to public safety that the application is beyond expectation of remedy. In the event that you do not dismiss the application outright, we ask that the following questions be answered before you do permit the proposed trials

1 How will explosive mixtures of air and fuel be prevented?

2 How will all causes of potential temperature excursions be prevented?

3 How can the feed system be designed to prevent discharge into the work spaces, or plugging of the screw feed?

4. How will the contaminated primary bed materials be kept from fouling?

5 How will catalysts in the afterburner and catalytic converter be kept from fouling?

6. How are the the cyclones prevented from plugging, and the sintered stainless steel filters protected from corrosion

7 How will halogens, sulfates and phosphates that fail to react with the Na_2CO_3 in the starved first reactor be prevented from discharging to the atmosphere?

8 How will the contaminated soluble-salt bed materials be safely disposed, when land burial is prohibited?

9 What are all the potential vapors of plutonium and uranium, iodine, selenium and etc and what are the computed discharges?

10. How will the gas-cooling systems be guaranteed to function without failures?

11 How will condensates be prevented from forming in the filter system?

12. What continuous monitoring system will be installed to provide prompt evidence of system failures, including plutonium discharges of the magnitudes claimed?

13. What are all the forseeable malfunctions that could occur, their causes and preventions?

14. What proof is offered that no increases of epidemiologic risk to Rocky Flats workers or area residents will develop as a result of the proposed trial burn or the proposed production incineration?

15. What will be done to arrest the discharge of particulate plutonium, both above and below the 0.3 micron reference size?

16. What is the full report of an independent review by a competent board of experts in the several areas of concern, namely, process engineering, chemistry, meteorology and health physics?

17 What is the complete data base on particulate and gaseous emissions of hazardous chemicals and radionuclides resulting from prior operation of the subject incinerator and any other incinerator(s) that have operated at Rocky Flats?

18. What is the detailed inventory of metal contents of all wastes proposed for incineration, including both solids and liquids?

19. What are the pertinent details of plutonium chemistry related to the proposed process that would disclose likely products of incineration?

20. If monitoring only advises when an unwanted release to the environment has been made, what guarantees containment?

21 Does the Los Alamos (Wilkerson, 1987) study of mortality among 5,413 Rocky Flats employees show elevated cancer incidence?

22 What proportion, and what weight of plutonium particles will be below the 0.3 micron size?

23 What is being done to improve monitoring/sampling equipment to fully disclose sub-micron sizes and amounts?

24 What are the results of thorough, state-of-the-art meteorological and dispersion models?

25 Have these been validated by tracer studies?

26 What are appropriate meteorological criteria for incinerator shut-down conditions?

27 What are the current plutonium dosages in the region, without further incineration, and with the proposed incineration?

28 What are the regional consequences of an accident to the

incinerator or its parts?

29. How will emergency conditions be handled in the future, as far as public notice, evacuation or indemnification?

30. Are there undisclosed motives for seeking to incinerate at Rocky Flats, in spite of proximity to 1.8 million potential victims?

31. What can be done to make the temporary local storage of those wastes more secure?

32. What is the cost of shipping liquids and solids, vs. the cost of the proposed incineration and residue disposal?

33. What is the statistical data on transportation hazards?

34. Have traditional low-temperature distillation techniques been investigated for concentrating radioactive residues from the oils and solvents?

35. Have such rudimentary processes as precipitation, filtration, dehydration or sedimentation been evaluated, and if so, what applicability does each have?

36. What is your evaluation of supercompaction for volume reduction of solids?

37. If the proposed incinerator is a one-of-a kind item, is it prudent to experiment in this populous area?

38. What is the fate of PCB's that may exist, and of dioxins that may be produced from PVC and hydrocarbons?

39. Why is there no scrubber for gaseous emissions?

40. Could the incinerator be removed to a safer site, say a government reservation, such as the Nevada Test site?

Sincerely,

David Snow, Ph D, P.E
Niels Schonbeck, Ph.D
Harvey Nichols, Ph D
Gale Biggs Ph D
Joe Goldfield, B.Ch E, P.E